

North American Seasonal Fire Assessment and Outlook

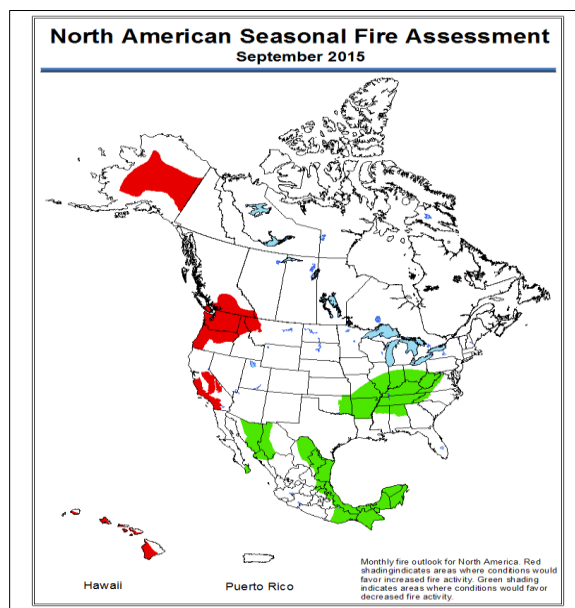
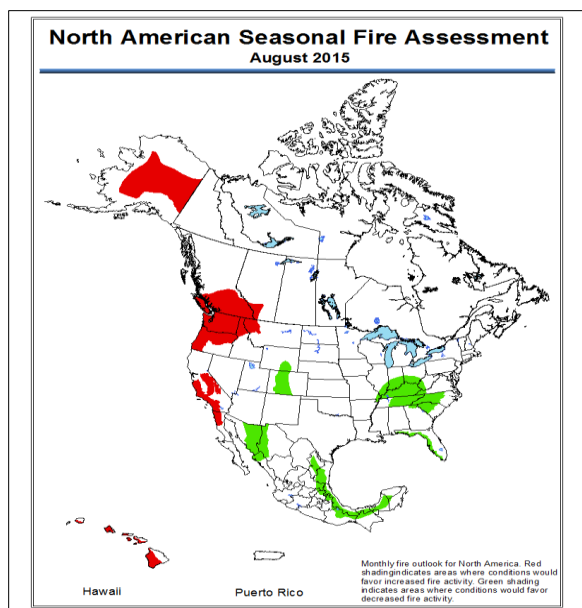
National Interagency Fire Center • Natural Resources Canada • Servicio Meteorológico Nacional
United States Canada Mexico

Outlook Period – August and September 2015
Issued on 10 August 2015

Executive Summary

The seasonal fire outlook for August indicates that conditions across southwestern Canada are favorable for continued wildland fire activity over southern British Columbia and far southwestern Alberta. In the United States, conditions are favorable for continued wildland fire activity across the eastern and central Interior of Alaska; all of Washington; northern and western Oregon; northern Idaho; northwestern Montana; and the coastal mountains and the Sierras of southern California. Conditions are favorable for a decrease in wildland fire activity across the Rockies of Colorado and southern Wyoming; much of the Ohio and Tennessee Valleys; and the southern Appalachian mountains and foothills. In Mexico, decreasing wildland fire activity is expected across the northwest and just inland along the Gulf coast. Increased wildland fire activity is expected in northern Baja California.

The seasonal fire outlook for September suggests conditions are favorable for continued wildland fire activity in Canada over southwestern British Columbia. In the United States, conditions are favorable for continued wildland fire activity across the eastern and central Interior of Alaska; all of Washington; northern and western Oregon; northern Idaho; northwestern Montana; and coastal mountains and the Sierras of southern California. Conditions are favorable for a decrease in wildland fire activity across the Mid-Mississippi Valley and most of the Ohio and Tennessee Valleys. In Mexico, conditions remain favorable for decreases in wildland fire activity over northwestern Mexico; northeastern Mexico along the Texas border; along the Gulf coast; and far southern Mexico.



Monthly fire outlook for North America for August (left) and September (right). Red shading indicates areas where conditions would favor increased fire activity. Green shading indicates areas where conditions would favor decreased fire activity.



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Critical Factors

The critical factors influencing significant fire potential for this outlook period are:

El Niño-Southern Oscillation: El Niño conditions (warming of the equatorial Pacific Ocean) are forecast to continue strengthening into the fall. This will have a significant effect on how the fire season progresses across North America, especially across western Canada and the U.S.

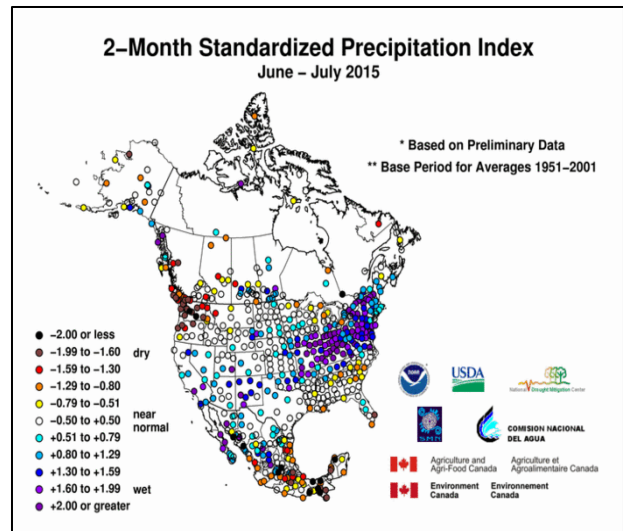
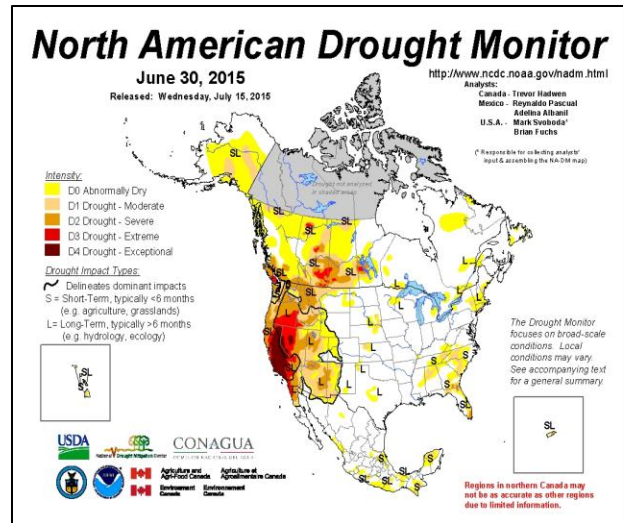
Drought: The North American Drought Monitor from 30 June 2015 (top right) shows severe to exceptional drought over most of the western U.S. with the worst conditions in California, western Nevada, southern Oregon, and parts of northern Baja California. Pockets of moderate to severe drought were over southern Alberta, Saskatchewan and Manitoba.

Fuels: Storm systems moving through western Canada in July brought enough precipitation to lower fire danger conditions from extreme levels a month earlier. Several moisture intrusions over the interior West, including moisture associated with Hurricane Delores, reduced fire danger across most of the region. Washington, Oregon, northern Idaho, and western Montana remained in extreme condition where precipitation deficits continued. Despite much above normal precipitation in California for July, it was not enough to overcome prolonged drought and fire danger remained elevated. Very dry conditions remain over the Interior of Alaska early in the month but gradually moderated as cooler conditions and scattered precipitation moved across the state. Rainy season conditions prevailed over much of northern and western Mexico while the south received below normal precipitation.

Fire Season Status: Fire season was winding down at the end of July across northwestern Canada but potential remains across southern British Columbia and southern Alberta. Conditions were moderating in Alaska but large fires will continue to burn for a while. Large fires continue in the Washington, Oregon and California where conditions are most favorable. Conditions around the rest of the western U.S. have moderated significantly and only a few isolated fires are active. Hot spots have decreased across most of Mexico where the rainy season conditions continue.

Canada Discussion

August: An unsettled weather pattern lowered the fire danger conditions in western Canada from the extreme values seen in July. An upper level low will sit along the West Coast for a few days before moving through the northwestern U.S. and into western Canada by mid-month. This will continue the unsettled conditions, lowering fire danger but bringing lightning activity.



Top: North American Drought Monitor from 30 April 2015. **Bottom:** 2-month Standardized Precipitation Index for March-April 2015. (Both from U.S. National Centers for Environmental Information, NCEI/NOAA)

The Prairies will continue to see a series of systems moving through the region keeping fire danger low. This will not affect the Northwest Territories, which may continue to see elevated values through the first half of the month.

Fire danger is expected to increase in the latter half of August for southern British Columbia and Alberta as above-average temperatures and below-average precipitation levels again affect the region.

A system is moving through Ontario mid-month will bring lightning and then rain to the region. Fire danger conditions will remain low for Quebec and the Maritimes.

September: Fall conditions are expected to cover most of Canada in September. Fire danger will likely be limited to southern British Columbia and southwestern Alberta where above-average temperatures and below-average precipitation levels will continue to affect the region.

United States Discussion

August: Very wet conditions across much of California and the western Great Basin in mid-July moderated conditions after a very hot and dry start to the month. Fuels across the Washington, Oregon and northern California were still receptive to fire and resulted in multiple large fires by the end of the month. Cooler-than-normal and continued wet conditions associated with an active monsoon sharply curtailed fire activity in the interior West. A high amplitude ridge over the central U.S. will keep the interior West in generally moist conditions while a series of troughs on the West coast keeps periodic lightning and shower events moving through the Northwest. Very high fire danger conditions from northern California to the far northern U.S. Rockies will keep the risk of large fires high through August.

Extreme heat and very dry conditions across the south central U.S. will increase fire danger for Texas and the lower Mississippi Valley. High humidity and lack of thunderstorms, however, will limit new ignitions. Alaska will see a decrease in new fire activity as late-season cooler weather and increases in precipitation associated with passing troughs occur. Existing fires will continue to burn and exhibit some growth when warm and dry conditions develop.

September: Fire potential will remain high across the Pacific Northwest and the far northern U.S. Rockies as warm and dry conditions are expected to continue. However, shorter burn periods and fewer opportunities for ignitions will mark a decrease in new fire activity across the region. The approach of fall weather marks a potential increase in fire activity across southern California as the probability of offshore wind events increases in September. The interior West continues its typical decline in fire activity. A return to wetter conditions across the southern U.S. as El Niño patterns continue to peak will greatly reduce fire potential over most of southern and eastern U.S.

Mexico Discussion

August: El Niño conditions increased precipitation across most of northern and western Mexico in July, leading to a significant decrease in wildfire activity across the country. A decrease in precipitation is expected for August but it will likely not affect the soil and fuel moistures across the country. Below normal fire activity should continue across northwestern Mexico and just inland of the Gulf coast region, including northwestern Mexico (Sonora, Sinaloa and western Chihuahua) and along Sierra Madre Oriental, northern Oaxaca and part of western Chiapas. A small area of above normal fire activity remains in northern Baja California.

September: Precipitation is expected to increase again in September for much of eastern Mexico along the Gulf coast and the Sierra Madre Oriental. Northwestern Mexico also shows a positive tendency. This suggests a continued decrease in the wildfire potential for the all the Gulf coast and Sierra Madre Oriental regions, the Yucatan Peninsula, far southern Mexico, and much of northwestern Mexico. This includes the states of Sonora, Chihuahua, Coahuila, Sinaloa, Baja California, Tamaulipas, Nuevo León, Veracruz, San Luis Potosi, Colima, Northern Puebla, Chiapas, Yucatan, Oaxaca, Tabasco, Veracruz, Quintana Roo, and Campeche. Central and western Mexico are likely to have normal or below normal precipitation but the increased soil moisture from the rainy season decreased fire fuels availability and should result in wildfire potential close to normal conditions. .

Additional Information

Additional and supplemental information for this outlook can be obtained at:

United States:

National Significant Wildland Fire Potential Outlook

http://www.predictiveservices.nifc.gov/outlooks/monthly_seasonal_outlook.pdf

Canada:

Canadian Wildland Fire Information System

<http://cwfis.cfs.nrcan.gc.ca/home>

Mexico:

Servicio Meteorológico Nacional

http://smn.cna.gob.mx/index.php?option=com_content&view=article&id=156&Itemid=113

Outlook Objective

The North American Seasonal Fire Assessment and Outlook is a general discussion of conditions that will affect the occurrence of wildland fires across Canada, the United States, and Mexico. Wildland fire is a natural part of many ecosystems across North America. This document provides a broad assessment of those factors that will contribute to an increase or decrease of seasonal fire activity. The objective is to assist wildland fire managers prepare for the potential variations in a typical fire season. It is not intended as a prediction of where and when wildland fires will occur nor is it intended to suggest any area is safe from the hazards of wildfire.

Acknowledgements

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